

WE CLAIM

1. An MHP television device including a GUI application and a user input wherein the GUI application maintains at least one notional wheel to which activities and strings for representing the activities may be assigned and generates an image for display, the image including an edge of the notional wheel on which a predetermined number of the strings are arranged for display, the GUI application being responsive to the user input both to rotate the notional wheel so as to display different strings and to select any activity represented by a string on the notional wheel at a predetermined position of the image.
2. An MHP television device according to claim 1 comprising one of a set top box and an integrated television.
3. An MHP television device according to claim 1 wherein the GUI application stores activities and their respective strings in groups, the strings of each group being assigned to a respective notional wheel and being available for display on the edge of the respective notional wheel and wherein the activities include groups, such that selection of a group causes the GUI application to generate an image including the edge of a notional wheel with the strings of the selected group.
4. An MHP television device according to claim 1 wherein the activities include television channels and the image includes a portion adjacent the predetermined position for displaying an internally assigned channel

number corresponding to the channel currently represented by the string at the predetermined position.

5. An MHP television device according to claim 1
5 wherein the image includes function areas corresponding to predetermined functions, the GUI application being responsive to the user input to initiate the functions.

6. An MHP television device according to claim 5
10 wherein, responsive to selection of an edit function, the GUI application generates an edit image including the edge of a notional wheel.

7. An MHP television device according to claim 6
15 wherein the edit image includes a hide function area and the GUI application is responsive to the hide function such that the string currently at the predetermined position may be hidden or unhidden from display.

8. An MHP television device according to claim 6
20 wherein the edit image includes a lock function area and the GUI application is responsive to the lock function such that the activity represented by the string currently at the predetermined position may be made
25 available or unavailable for selection.

9. An MHP television device according to claim 6
wherein the edit image includes a re-name function area and the GUI application is responsive to the re-name
30 function to generate a re-name image for display, the image including the edge of a notional wheel on which the string at the predetermined position of the notional wheel of the edit image is retained at the predetermined

position and characters appear at other positions of the notional wheel, the GUI application being responsive to the user input both to rotate the notional wheel and move the string within the predetermined position such that
5 each character of the string can be changed in turn by rotating the notional wheel.

10. An MHP television device according to claim 6 wherein responsive to the user input, the GUI application
10 moves the string at the predetermined position to a temporary position so as to leave a space at the predetermined position or moves the string from the temporary position to the predetermined position, rotation of the notional wheel maintaining the space at
15 the predetermined position such that a string may be moved out of one position on the notional wheel and back in to a different position.

11. An MHP television device according to claim 10
20 wherein when a string is at the temporary position, the GUI application causes a copy function area to be displayed on the edit image and, responsive to selection of the copy function, the GUI application allows selection of other notional wheels, each with a space at
25 the predetermined position, thereby allowing the insertion of the string from the temporary position into the other notional wheels.

12. An MHP television device according to claim 5
30 wherein responsive to selection of a scan function, the GUI application generates a scan image including the edge of a notional wheel and a start function area, the GUI application being responsive to the start function area

to initiate scanning of all available activities and to assign all of the detected activities and their respective strings to the notional wheel.

5 13. An MHP television device according to claim 1 wherein the GUI application only conducts a repaint operation to update an image for display upon receipt of an appropriate trigger, the GUI application then determining which part of the image requires an update and conducting
10 a repaint operation for that part.

14. An MHP television device according to claim 1 wherein the GUI application comprises a wheel data object for maintaining a list of activities in relation to the
15 notional wheels and a string wheel object for providing data representing the displayed edge of the current notional wheel.

15. An MHP television device according to claim 14
20 wherein the GUI application further comprises a main pane object responsive to the user input and an animator object wherein, responsive to the user input to rotate a notional wheel, the main pane creates an animation object for rotating the wheel and the animator object controls
25 the animation object to change the data of the string wheel object on the basis of the data in the wheel data object.

16. An MHP television device according to claim 15
30 wherein each time the animator object controls the animation object to conduct a process to produce the next frame, the process returns the time to wait for the animation object to produce the following frame such that

when a predetermined number of animations have been conducted for rotating the notional wheel, the animation object conducts a process to align the wheel relative to the redetermined position.

5

17. A GUI application for use with an MHP television device and a user input wherein the GUI application maintains at least one notional wheel to which activities and strings for representing the activities may be assigned and generates an image for display, the image including an edge of the notional wheel on which a predetermined number of the strings are arranged for display, the GUI application being responsive to the user input both to rotate the notional wheel so as to display different strings and to select any activity represented by a string on the notional wheel at a predetermined position of the image.
- 15

18. A GUI application according to claim 17 wherein the GUI application stores activities and their respective strings in groups, the strings of each group being assigned to a respective notional wheel and being available for display on the edge of the respective notional wheel and wherein the activities include groups, such that selection of a group causes the GUI application to generate an image including the edge of a notional wheel with the strings of the selected group.
- 20
- 25

19. A method of providing an MHP television device including a user input with a graphical user interface comprising:
- 30

maintaining at least one notional wheel to which activities and strings for representing the activities

generating an image for display, the image including an edge of the notional wheel on which a predetermined number of the strings are arranged for display,

- 10 20. A computer readable storage medium having recorded thereon code components that, when loaded on an MHP television device and executed will cause that MHP television device to operate according to claim 19.